

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
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Application Serial Number: 10/579,286  
Source: IFWJ  
Date Processed by STIC: 5/24/06

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IFWP

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/10/579,286**

**DATE: 05/24/2006**  
**TIME: 12:21:38**

**Input Set : A:\39618a.txt**  
**Output Set: N:\CRF4\05242006\J579286.raw**

3 <110> APPLICANT: ANDREEV, et al.  
 5 <120> TITLE OF INVENTION: METHODS FOR IDENTIFYING MODULATORS OF ACTIVE KIT  
 TYROSINE KINASE  
 6 RECEPTOR  
 8 <130> FILE REFERENCE: 30694/39618A  
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/579,286  
 C--> 10 <141> CURRENT FILING DATE: 2006-05-15  
 10 <150> PRIOR APPLICATION NUMBER: US 60/526,930  
 11 <151> PRIOR FILING DATE: 2003-12-04  
 13 <160> NUMBER OF SEQ ID NOS: 6  
 15 <170> SOFTWARE: PatentIn version 3.2  
 17 <210> SEQ ID NO: 1  
 18 <211> LENGTH: 5084  
 19 <212> TYPE: DNA  
 20 <213> ORGANISM: Homo sapiens  
 22 <220> FEATURE:  
 23 <221> NAME/KEY: CDS  
 24 <222> LOCATION: (22)..(2952)  
 26 <400> SEQUENCE: 1  
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 28 Met Arg Gly Ala Arg Gly Ala Trp Asp Phe  
 29 1 5 10  
 31 ctc tgc gtt ctg ctc cta ctg ctt cgc gtc cag aca ggc tct tct caa 99  
 32 Leu Cys Val Leu Leu Leu Leu Arg Val Gln Thr Gly Ser Ser Gln  
 33 15 20 25  
 35 cca tct gtg agt cca ggg gaa ccg tct cca cca tcc atc cat cca gga 147  
 36 Pro Ser Val Ser Pro Gly Glu Pro Ser Pro Pro Ser Ile His Pro Gly  
 37 30 35 40  
 39 aaa tca gac tta ata gtc cgc gtg ggc gac gag att agg ctg tta tgc 195  
 40 Lys Ser Asp Leu Ile Val Arg Val Gly Asp Glu Ile Arg Leu Leu Cys  
 41 45 50 55  
 43 act gat ccg ggc ttt gtc aaa tgg act ttt gag atc ctg gat gaa acg 243  
 44 Thr Asp Pro Gly Phe Val Lys Trp Thr Phe Glu Ile Leu Asp Glu Thr  
 45 60 65 70  
 47 aat gag aat aag cag aat gaa tgg atc acg gaa aag gca gaa gcc acc 291  
 48 Asn Glu Asn Lys Gln Asn Glu Trp Ile Thr Glu Lys Ala Glu Ala Thr  
 49 75 80 85 90  
 51 aac acc ggc aaa tac acg tgc acc aac aaa cac ggc tta agc aat tcc 339  
 52 Asn Thr Gly Lys Tyr Thr Cys Thr Asn Lys His Gly Leu Ser Asn Ser  
 53 95 100 105  
 55 att tat gtg ttt gtt aga gat cct gcc aag ctt ttc ctt gtt gac cgc 387  
 56 Ile Tyr Val Phe Val Arg Asp Pro Ala Lys Leu Phe Leu Val Asp Arg  
 57 110 115 120  
 59 tcc ttg tat ggg aaa gaa gac aac gac acg ctg gtc cgc tgt cct ctc 435

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61		125				130							135				
63	aca	gac	cca	gaa	gtg	acc	aat	tat	tcc	ctc	aag	ggg	tgc	cag	ggg	aag	483
64	Thr	Asp	Pro	Glu	Val	Thr	Asn	Tyr	Ser	Leu	Lys	Gly	Cys	Gln	Gly	Lys	
65		140				145							150				
67	cct	ctt	ccc	aag	gac	ttg	agg	ttt	att	cct	gac	ccc	aag	gcg	ggc	atc	531
68	Pro	Leu	Pro	Lys	Asp	Leu	Arg	Phe	Ile	Pro	Asp	Pro	Lys	Ala	Gly	Ile	
69	155					160						165			170		
71	atg	atc	aaa	agt	gtg	aaa	cgc	gcc	tac	cat	cg	ctc	tgt	ctg	cat	tgt	579
72	Met	Ile	Lys	Ser	Val	Lys	Arg	Ala	Tyr	His	Arg	Leu	Cys	Leu	His	Cys	
73						175					180			185			
75	tct	gtg	gac	cag	gag	ggc	aag	tca	gtg	ctg	tcg	gaa	aaa	ttc	atc	ctg	627
76	Ser	Val	Asp	Gln	Glu	Gly	Lys	Ser	Val	Leu	Ser	Glu	Lys	Phe	Ile	Leu	
77						190					195			200			
79	aaa	gtg	agg	cca	gcc	ttc	aaa	gct	gtg	cct	gtt	gtg	tct	gtg	tcc	aaa	675
80	Lys	Val	Arg	Pro	Ala	Phe	Lys	Ala	Val	Pro	Val	Val	Ser	Val	Ser	Lys	
81						205					210			215			
83	gca	agc	tat	ctt	ctt	agg	gaa	ggg	gaa	ttc	aca	gtg	acg	tgc	aca	723	
84	Ala	Ser	Tyr	Leu	Leu	Arg	Glu	Gly	Glu	Glu	Phe	Thr	Val	Thr	Cys	Thr	
85						220					225			230			
87	ata	aaa	gat	gtg	tct	agt	tct	gtg	tac	tca	acg	tgg	aaa	aga	gaa	aac	771
88	Ile	Lys	Asp	Val	Ser	Ser	Val	Tyr	Ser	Thr	Trp	Lys	Arg	Glu	Asn		
89	235					240					245			250			
91	agt	cag	act	aaa	cta	cag	gag	aaa	tat	aat	acg	tgg	cat	cac	ggt	gac	819
92	Ser	Gln	Thr	Lys	Leu	Gln	Glu	Lys	Tyr	Asn	Ser	Trp	His	His	Gly	Asp	
93						255					260			265			
95	tcc	aat	tat	gaa	cgt	cag	gca	acg	ttg	act	atc	agt	tca	gcg	aga	gtt	867
96	Phe	Asn	Tyr	Glu	Arg	Gln	Ala	Thr	Leu	Thr	Ile	Ser	Ser	Ala	Arg	Val	
97						270					275			280			
99	aat	gat	tct	gga	gtg	ttc	atg	tgt	tat	gcc	aat	aat	act	ttt	gga	tca	915
100	Asn	Asp	Ser	Gly	Val	Phe	Met	Cys	Tyr	Ala	Asn	Asn	Thr	Phe	Gly	Ser	
101						285					290			295			
103	gca	aat	gtc	aca	aca	acc	ttg	gaa	gta	gta	gat	aaa	gga	ttc	att	aat	963
104	Ala	Asn	Val	Thr	Thr	Leu	Glu	Val	Val	Asp	Lys	Gly	Phe	Ile	Asn		
105						300					305			310			
107	atc	ttc	ccc	atg	ata	aac	act	aca	gtt	ttt	gta	ttc	aat	gat	gga	aat	1011
108	Ile	Phe	Pro	Met	Ile	Asn	Thr	Thr	Val	Phe	Val	Asn	Asp	Gly	Glu	Asn	
109	315					320					325			330			
111	gta	gat	ttg	att	gtt	gaa	tat	gaa	gca	ttc	ccc	aaa	cct	gaa	cac	cag	1059
112	Val	Asp	Leu	Ile	Val	Glu	Tyr	Glu	Ala	Phe	Pro	Lys	Pro	Glu	His	Gln	
113						335					340			345			
115	cag	tgg	atc	tat	atg	aac	aga	acc	ttc	act	gat	aaa	tgg	gaa	gat	tat	1107
116	Gln	Trp	Ile	Tyr	Met	Asn	Arg	Thr	Phe	Thr	Asp	Lys	Trp	Glu	Asp	Tyr	
117						350					355			360			
119	ccc	aag	tct	gag	aat	gaa	agt	aat	atc	aga	tac	gta	agt	gaa	ttt	cat	1155
120	Pro	Lys	Ser	Glu	Asn	Glu	Ser	Asn	Ile	Arg	Tyr	Val	Ser	Glu	Leu	His	
121						365					370			375			
123	cta	acg	aga	tta	aaa	ggc	acc	gaa	gga	ggc	act	tac	aca	ttc	cta	gtg	1203
124	Leu	Thr	Arg	Leu	Lys	Gly	Thr	Glu	Gly	Gly	Thr	Tyr	Thr	Phe	Leu	Val	

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128	Ser Asn Ser Asp Val Asn Ala Ala Ile Ala Phe Asn Val Tyr Val Asn				
129	395	400	405	410	
131	aca aaa cca gaa atc ctg act tac gac agg ctc gtg aat ggc atg ctc			1299	
132	Thr Lys Pro Glu Ile Leu Thr Tyr Asp Arg Leu Val Asn Gly Met Leu				
133	415	420		425	
135	caa tgt gtg gca gca gga ttc cca gag ccc aca ata gat tgg tat ttt			1347	
136	Gln Cys Val Ala Ala Gly Phe Pro Glu Pro Thr Ile Asp Trp Tyr Phe				
137	430	435	440		
139	tgt cca gga act gag cag aga tgc tct gct tct gta ctg cca gtg gat			1395	
140	Cys Pro Gly Thr Glu Gln Arg Cys Ser Ala Ser Val Leu Pro Val Asp				
141	445	450	455		
143	gtg cag aca cta aac tca tct ggg cca ccg ttt gga aag cta gtg gtt			1443	
144	Val Gln Thr Leu Asn Ser Ser Gly Pro Pro Phe Gly Lys Leu Val Val				
145	460	465	470		
147	cag agt tct ata gat tct agt gca ttc aag cac aat ggc acg gtt gaa			1491	
148	Gln Ser Ser Ile Asp Ser Ser Ala Phe Lys His Asn Gly Thr Val Glu				
149	475	480	485	490	
151	tgt aag gct tac aac gat gtg ggc aag act tct gcc tat ttt aac ttt			1539	
152	Cys Lys Ala Tyr Asn Asp Val Gly Lys Thr Ser Ala Tyr Phe Asn Phe				
153	495	500	505		
155	gca ttt aaa ggt aac aac aaa gag caa atc cat ccc cac acc ctg ttc			1587	
156	Ala Phe Lys Gly Asn Asn Lys Glu Gln Ile His Pro His Thr Leu Phe				
157	510	515	520		
159	act cct ttg ctg att ggt ttc gta atc gta gct ggc atg atg tgc att			1635	
160	Thr Pro Leu Leu Ile Gly Phe Val Ile Val Ala Gly Met Met Cys Ile				
161	525	530	535		
163	att gtg atg att ctg acc tac aaa tat tta cag aaa ccc atg tat gaa			1683	
164	Ile Val Met Ile Leu Thr Tyr Lys Tyr Leu Gln Lys Pro Met Tyr Glu				
165	540	545	550		
167	gta cag tgg aag gtt gtt gag gag ata aat gga aac aat tat gtt tac			1731	
168	Val Gln Trp Lys Val Val Glu Glu Ile Asn Gly Asn Asn Tyr Val Tyr				
169	555	560	565	570	
171	ata gac cca aca caa ctt cct tat gat cac aaa tgg gag ttt ccc aga			1779	
172	Ile Asp Pro Thr Gln Leu Pro Tyr Asp His Lys Trp Glu Phe Pro Arg				
173	575	580	585		
175	aac agg ctg agt ttt ggg aaa acc ctg ggt gct gga gct ttc ggg aag			1827	
176	Asn Arg Leu Ser Phe Gly Lys Thr Leu Gly Ala Gly Ala Phe Gly Lys				
177	590	595	600		
179	gtt gtt gag gca act gct tat ggc tta att aag tca gat gcg gcc atg			1875	
180	Val Val Glu Ala Thr Ala Tyr Gly Leu Ile Lys Ser Asp Ala Ala Met				
181	605	610	615		
183	act gtc gct gta aag atg ctc aag ccg agt gcc cat ttg aca gaa cgg			1923	
184	Thr Val Ala Val Lys Met Leu Lys Pro Ser Ala His Leu Thr Glu Arg				
185	620	625	630		
187	gaa gcc ctc atg tct gaa ctc aaa gtc ctg agt tac ctt ggt aat cac			1971	
188	Glu Ala Leu Met Ser Glu Leu Lys Val Leu Ser Tyr Leu Gly Asn His				
189	635	640	645	650	

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191 atg aat att gtg aat cta ctt gga gcc tgc acc att gga ggg ccc acc	2019
192 Met Asn Ile Val Asn Leu Leu Gly Ala Cys Thr Ile Gly Gly Pro Thr	
193 655 660 665	
195 ctg gtc att aca gaa tat tgt tgc tat ggt gat ctt ttg aat ttt ttg	2067
196 Leu Val Ile Thr Glu Tyr Cys Cys Tyr Gly Asp Leu Leu Asn Phe Leu	
197 670 675 680	
199 aga aga aaa cgt gat tca ttt att tgt tca aag cag gaa gat cat gca	2115
200 Arg Arg Lys Arg Asp Ser Phe Ile Cys Ser Lys Gln Glu Asp His Ala	
201 685 690 695	
203 gaa gct gca ctt tat aag aat ctt ctg cat tca aag gag tct tcc tgc	2163
204 Glu Ala Ala Leu Tyr Lys Asn Leu Leu His Ser Lys Glu Ser Ser Cys	
205 700 705 710	
207 agc gat agt act aat gag tac atg gac atg aaa cct gga gtt tct tat	2211
208 Ser Asp Ser Thr Asn Glu Tyr Met Asp Met Lys Pro Gly Val Ser Tyr	
209 715 720 725 730	
211 gtt gtc cca acc aag gcc gac aaa agg aga tct gtg aga ata ggc tca	2259
212 Val Val Pro Thr Lys Ala Asp Lys Arg Arg Ser Val Arg Ile Gly Ser	
213 735 740 745	
215 tac ata gaa aga gat gtg act ccc gcc atc atg gag gat gac gag ttg	2307
216 Tyr Ile Glu Arg Asp Val Thr Pro Ala Ile Met Glu Asp Asp Glu Leu	
217 750 755 760	
219 gcc cta gac tta gaa gac ttg ctg agc ttt tct tac cag gtg gca aag	2355
220 Ala Leu Asp Leu Glu Asp Leu Leu Ser Phe Ser Tyr Gln Val Ala Lys	
221 765 770 775	
223 ggc atg gct ttc ctc gcc tcc aag aat tgt att cac aga gac ttg gca	2403
224 Gly Met Ala Phe Leu Ala Ser Lys Asn Cys Ile His Arg Asp Leu Ala	
225 780 785 790	
227 gcc aga aat atc ctc ctt act cat ggt cggt atc aca aag att tgt gat	2451
228 Ala Arg Asn Ile Leu Leu Thr His Gly Arg Ile Thr Lys Ile Cys Asp	
229 795 800 805 810	
231 ttt ggt cta gcc aga gac atc aag aat gat tct aat tat gtg gtt aaa	2499
232 Phe Gly Leu Ala Arg Asp Ile Lys Asn Asp Ser Asn Tyr Val Val Lys	
233 815 820 825	
235 gga aac gct cga cta cct gtg aag tgg atg gca cct gaa agc att ttc	2547
236 Gly Asn Ala Arg Leu Pro Val Lys Trp Met Ala Pro Glu Ser Ile Phe	
237 830 835 840	
239 aac tgt gta tac acg ttt gaa agt gac gtc tgg tcc tat ggg att ttt	2595
240 Asn Cys Val Tyr Thr Phe Glu Ser Asp Val Trp Ser Tyr Gly Ile Phe	
241 845 850 855	
243 ctt tgg gag ctg ttc tct tta gga agc agc ccc tat cct gga atg ccg	2643
244 Leu Trp Glu Leu Phe Ser Leu Gly Ser Ser Pro Tyr Pro Gly Met Pro	
245 860 865 870	
247 gtc gat tct aag ttc tac aag atg atc aag gaa ggc ttc cggt atg ctc	2691
248 Val Asp Ser Lys Phe Tyr Lys Met Ile Lys Glu Gly Phe Arg Met Leu	
249 875 880 885 890	
251 agc cct gaa cac gca cct gct gaa atg tat gac ata atg aag act tgc	2739
252 Ser Pro Glu His Ala Pro Ala Glu Met Tyr Asp Ile Met Lys Thr Cys	
253 895 900 905	
255 tgg gat gca gat ccc cta aaa aga cca aca ttc aag caa att gtt cag	2787

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260	Leu Ile Glu Lys Gln Ile Ser Glu Ser Thr Asn His Ile Tyr Ser Asn			
261	925	930	935	
263	tta gca aac tgc agc ccc aac cga cag aag ccc gtg gta gac cat tct	2883		
264	Leu Ala Asn Cys Ser Pro Asn Arg Gln Lys Pro Val Val Asp His Ser			
265	940	945	950	
267	gtg cgg atc aat tct gtc ggc agc acc gct tcc tcc tcc cag cct ctg	2931		
268	Val Arg Ile Asn Ser Val Gly Ser Thr Ala Ser Ser Ser Gln Pro Leu			
269	955	960	965	970
271	ctt gtg cac gac gat gtc tga gcagaatcag tgtttggtc acccctccag	2982		
272	Leu Val His Asp Asp Val			
273	975			
275	aatgatctc ttctttggc ttccatgatg gttattttct tttcttcaa cttgcattcca	3042		
277	actccaggat agtggcacc ccactgcaat cctgtcttc tgagcacact ttagtggccg	3102		
279	atgattttg tcatacgcca ccataccttatt gcaaagggttcaactgtata tattccaaat	3162		
281	agcaacgtag cttctaccat gaacagaaaaa cattctgatt tgaaaaaaga gagggaggta	3222		
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289	tagaacaaag gacagagtat gaacacctgg gcttaagaaa tctatgtattt catgtgggaa	3462		
291	atgagacata ggccatgaaa aaaatgatcc ccaaggtgtca acaaaagatg ctcttctgt	3522		
293	gaccactgca tgagcttta tactaccgac ctggtttta aatagagttt gctattagag	3582		
295	cattgaatttgg gagagaaggc ctccctagcc agcaattgtata tatacgcattc tataaatttgc	3642		
297	ccgtgttcat acatggagg ggaaaacacc ataagggttca gtttctgtat acaaccctgg	3702		
299	cattatgtcc actgtgtata gaagtagattt aagagccata taagtttggaa ggaaacagtt	3762		
301	aataccattt tttaaggaaa caatataacc acaaagcaca gtttgaacaa aatctccctct	3822		
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311	gtacgtttgt atgtgtgtt acaaaatattt ggaggggat tttttttttt tttttttttt	4122		
313	ggccctttttt tacctggaaa gtaacttggc ttccattttt agtactgtttt ttgtttttttt	4182		
315	tcacatagct gtcttagatg gttttttttt tttttttttt tttttttttt tttttttttt	4242		
317	ggcatcagtc cttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4302		
319	catcttacttgg tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt	4362		
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323	aaacaaaaaaa aaacaaaaaaa cttttttttt tttttttttt tttttttttt tttttttttt	4482		
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L:10 M:270 C: Current Application Number differs, Replaced Current Application No  
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date